OIPE

RAW SEQUENCE LISTING DATE: 10/01/2002 P.6
PATENT APPLICATION: US/09/981,151A TIME: 15:06:39

Input Set : A:\CURA-468.txt
Output Set: N:\CRF4\10012002\I981151A.raw

<110> APPLICANT: Edinger, Shlomit R
Gerlach, Valerie
MacDougall, John R
Malyankar, Muriel M
Smithson, Glennda
Millet, Isabelle
Peyman, John A
Stone, David J
Gunther, Erik
Ellerman, Karen
Shimkets, Richard A
Padigaru, Muralidhara
Guo, Xiaojia
Patturajan, Meera
Taupier Jr, Raymond J
Burgess, Catherine E
Zerhusen, Bryan D
Kekuda, Ramesh
Spytek, Kimberly A
Gangolli, Esha A
Fernandes, Elma R
Gorman, Linda
<120> TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
<130> FILE REFERENCE: 21402-168
<140> CURRENT APPLICATION NUMBER: 09/981,151A
<141> CURRENT FILING DATE 2001-10-16
<150> PRIOR APPLICATION NUMBER: 60/241,040
<151> PRIOR FILING DATE 2000-10-17
<150> PRIOR APPLICATION NUMBER: 60/241,058
<151> PRIOR FILING DATE 2000-10-17
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<151> PRIOR FILING DATE 2000-10-17
<150> PRIOR APPLICATION NUMBER: 60/241,243
<151> PRIOR FILING DATE: 2000-10-17
<150> PRIOR APPLICATION NUMBER: 60/242,152
<151> PRIOR FILING DATE: 2000-10-20
<150> PRIOR APPLICATION NUMBER: 60/242,482
<151> PRIOR FILING DATE: 2000-10-23
<150> PRIOR APPLICATION NUMBER: 60/242,611
<151> PRIOR FILING DATE 2000-10-23
<150> PRIOR APPLICATION NUMBER: 60/242,612
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PATENT APPLICATION: **US/09/981,151A** TIME: 15:06:39

Input Set : **A:\CURA-468.txt**
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64 <151> PRIOR FILING DATE: 2000-12-29
66 <150> PRIOR APPLICATION NUMBER: 60/269,813
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72 <150> PRIOR APPLICATION NUMBER: 60/294,108
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75 <150> PRIOR APPLICATION NUMBER: 60/303,968
76 <151> PRIOR FILING DATE: 2001-07-09
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105 tccggacagc tggaggcgag tccccgcggg ctcctctccc gcggaccccg ccgtctcacc 180
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109 gaaaaccaaa cactgcatgt tctcactcaa tatgacctgg tctctgccta cgaggttgac 420
110 cacaggggcg attacgtgtc ccatgaaatc atgcaccatc agcggcggag aagagcagtg 480
111 gccgtgtccg aggttgagtc tcttcacctt cggctgaaag gccccaggca cgacttccac 540
112 atggatctga ggacttccag cagcctagtg gctcctggct ttattgtgca gacgttggga 600
113 aagacaggca ctaagtctgt gcagacttta ccgccagagg acttctgttt ctatcaaggc 660
114 tctttgcgat cacacagaaa ctcgccatcg catggaggga agttctgtga gggctccact 720
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Input Set : **A:\CURA-468.txt**
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     121 cgctctcttc tgaggtccca tagaaatgaa gaactgaacg tggagacctt ggtggtggtc 1140
     122 gacaaaaaga tgatgcaaaa ccatggccat gaaaatatca ccacctacgt gctcacgata 1200
     123 ctcaacatgg tatctgcttt attcaaagat ggaacaatag gaggaaacat caacattgca 1260
     124 attgtaggtc tgattcttct agaagatgaa cagccaggac tggtgataag tcaccacgca 1320
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     128 attaatgaag atacaggtct tggactggcc ttcaccattg cccatgagtc tggacacaac 1560
     129 tttggcatga ttcatgatgg agaagggaac atgtgtaaaa agtccgaggg caacatcatg 1620
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     131 ctacacaaat ttctaagcac cgctcaagct atctgccttg ctgatcagcc aaagcctgtg 1740
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     144 acgattcaca ggggtctcta caccaagcac caccacacca accattatca catggtcacc 2520
     145 attcttctg gagcccggag tatccgcatc tatgaaatga acgtctctac ctcctacatt 2580
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     147 ggccggtaca aattttcggg cactactttc gactacagac ggtcctataa tgagcccgag 2700
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     174 Leu Leu Ala Gln Val Ala Glu Gln Val Ser Pro Gly Arg Ser His Gln
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PATENT APPLICATION US/09/981,151A TIME: 15:06:39

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178           35                  40                  45
180 Leu Ser Arg Gly Pro Arg Arg Leu Thr Ala Met Ser Pro Leu Phe Ser
181       50                  55                  60
183 Ala Gly Thr Cys Val Arg His Gly Thr Arg Ser Gly Ser Ala Trp Glu
184  65                  70                  75                  80
186 Pro Glu Arg Pro Ala Ser Ser Ser Thr Arg Gly Ala Ala Gly Leu Asp
187                  85                  90                  95
189 Gly Lys Gly Arg Asp Met Asp Glu Ala Gly Asn His Arg Ser Gln Gln
190              100                 105                 110
192 Thr Asn Thr Gly Thr Glu Asn Gln Thr Leu His Val Leu Thr Gln Tyr
193          115                 120                 125
195 Asp Leu Val Ser Ala Tyr Glu Val Asp His Arg Gly Asp Tyr Val Ser
196      130                 135                 140
198 His Glu Ile Met His His Gln Arg Arg Arg Arg Ala Val Ala Val Ser
199 145                 150                 155                 160
201 Glu Val Glu Ser Leu His Leu Arg Leu Lys Gly Pro Arg His Asp Phe
202                  165                 170                 175
204 His Met Asp Leu Arg Thr Ser Ser Ser Leu Val Ala Pro Gly Phe Ile
205              180                 185                 190
207 Val Gln Thr Leu Gly Lys Thr Gly Thr Lys Ser Val Gln Thr Leu Pro
208          195                 200                 205
210 Pro Glu Asp Phe Cys Phe Tyr Gln Gly Ser Leu Arg Ser His Arg Asn
211      210                 215                 220
213 Ser Pro Ser His Gly Gly Lys Phe Cys Glu Gly Ser Thr Arg Thr Leu
214 225                 230                 235                 240
216 Lys Leu Cys Asn Ser Gln Lys Cys Pro Arg Asp Ser Val Asp Phe Arg
217                  245                 250                 255
219 Ala Ala Gln Cys Ala Glu His Asn Ser Arg Arg Phe Arg Gly Arg His
220              260                 265                 270
W--> 222 Tyr Lys Trp Lys Pro Tyr Thr Gln Val Glu Xaa Asp Leu Cys Lys Leu
223          275                 280                 285
225 Tyr Cys Ile Ala Glu Gly Phe Asp Phe Phe Phe Ser Leu Ser Asn Lys
226      290                 295                 300
228 Val Lys Asp Gly Thr Pro Cys Ser Glu Asp Ser Arg Asn Val Cys Ile
229 305                 310                 315                 320
231 Asp Gly Ile Cys Glu Leu Ser Val Val Ser Thr Ser Ala His Met Pro
232                  325                 330                 335
234 Gln Pro Pro Lys Glu Asp Leu Phe Ile Leu Pro Asp Glu Tyr Lys Ser
235              340                 345                 350
237 Cys Leu Arg His Lys Arg Ser Leu Leu Arg Ser His Arg Asn Glu Glu
238          355                 360                 365
240 Leu Asn Val Glu Thr Leu Val Val Val Asp Lys Lys Met Met Gln Asn
241      370                 375                 380
243 His Gly His Glu Asn Ile Thr Thr Tyr Val Leu Thr Ile Leu Asn Met
244 385                 390                 395                 400
246 Val Ser Ala Leu Phe Lys Asp Gly Thr Ile Gly Gly Asn Ile Asn Ile
247                  405                 410                 415
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RAW SEQUENCE LISTING DATE: 10/01/2002
PATENT APPLICATION **US/09/981,151A** TIME: 15:06:39

Input Set : **A:\CURA-468.txt**
Output Set: **N:\CRF4\10012002\I981151A.raw**

```
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250             420                 425                 430
252 Ile Ser His His Ala Asp His Thr Leu Ser Ser Phe Cys Gln Trp Gln
253         435                 440                 445
255 Ser Gly Leu Met Gly Lys Asp Gly Thr Arg His Asp His Ala Ile Leu
256     450                 455                 460
258 Leu Thr Gly Leu Asp Ile Cys Ser Trp Lys Asn Glu Pro Cys Asp Thr
259 465                 470                 475                 480
261 Leu Gly Phe Ala Pro Ile Ser Gly Met Cys Ser Lys Tyr Arg Ser Cys
262                 485                 490                 495
264 Thr Ile Asn Glu Asp Thr Gly Leu Gly Leu Ala Phe Thr Ile Ala His
265             500                 505                 510
267 Glu Ser Gly His Asn Phe Gly Met Ile His Asp Gly Glu Gly Asn Met
268         515                 520                 525
270 Cys Lys Lys Ser Glu Gly Asn Ile Met Ser Pro Thr Leu Ala Gly Arg
271     530                 535                 540
273 Asn Gly Val Phe Ser Trp Ser Pro Cys Ser Arg Gln Tyr Leu His Lys
274 545                 550                 555                 560
276 Phe Leu Ser Thr Ala Gln Ala Ile Cys Leu Ala Asp Gln Pro Lys Pro
277                 565                 570                 575
279 Val Lys Glu Tyr Lys Tyr Pro Glu Lys Leu Pro Gly Glu Leu Tyr Asp
280             580                 585                 590
282 Ala Asn Thr Gln Cys Lys Trp Gln Phe Gly Glu Lys Ala Lys Leu Cys
283         595                 600                 605
285 Met Leu Asp Phe Lys Lys Asp Ile Cys Lys Ala Leu Trp Cys His Arg
286     610                 615                 620
288 Ile Gly Arg Lys Cys Glu Thr Lys Phe Met Pro Ala Ala Glu Gly Thr
289 625                 630                 635                 640
291 Ile Cys Gly His Asp Met Trp Cys Arg Gly Gly Gln Cys Val Lys Tyr
292                 645                 650                 655
294 Gly Asp Glu Gly Pro Lys Pro Thr His Gly His Trp Ser Asp Trp Ser
295             660                 665                 670
297 Ser Trp Ser Pro Cys Ser Arg Thr Cys Gly Gly Gly Val Ser His Arg
298         675                 680                 685
300 Ser Arg Leu Cys Thr Asn Pro Asn Pro Ser His Gly Gly Lys Phe Cys
301     690                 695                 700
303 Glu Gly Ser Thr Arg Thr Leu Lys Leu Cys Asn Ser Gln Lys Cys Pro
304 705                 710                 715                 720
306 Arg Asp Ser Val Asp Phe Arg Ala Ala Gln Cys Ala Glu His Asn Ser
307                 725                 730                 735
309 Arg Arg Phe Arg Gly Arg His Tyr Lys Trp Lys Pro Gln Asp Leu Cys
310             740                 745                 750
312 Lys Leu Tyr Cys Ile Ala Glu Gly Phe Asp Phe Phe Phe Ser Leu Ser
313         755                 760                 765
315 Asn Lys Val Lys Asp Gly Thr Pro Cys Ser Glu Asp Ser Arg Asn Val
316     770                 775                 780
W--> 318 Cys Ile Asp Gly Ile Cys Glu Xaa Gly Cys Asp Asn Val Leu Gly Ser
319 785                 790                 795                 800
321 Asp Ala Val Glu Asp Val Cys Gly Val Cys Asn Gly Asn Asn Ser Ala
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 10/01/2002
PATENT APPLICATION: US/09/981,151A TIME: 15:06:40

Input Set : A:\CURA-468.txt
Output Set: N:\CRF4\10012002\I981151A.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 857,858,2383,2983
Seq#:2; Xaa Pos. 283,792
Seq#:23; N Pos. 2196,2230,2261,2270,2295,2301
Seq#:34; Xaa Pos. 450
Seq#:65; Xaa Pos. 41

VERIFICATION SUMMARY DATE: 10/01/2002
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Input Set **A:\CURA-468.txt**
Output Set **N:\CRF4\10012002\I981151A.raw**

L:117 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:840
L:142 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:2340
L:152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:2940
L:222 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:272
L:318 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:784
L:1977 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:2160
L:1978 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:2220
L:1979 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:2280
L:3377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:448
L:6527 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65 after pos.:32